



330509

BENNIE M. LAUGHTER
General Counsel and Secretary

June 12, 1984

HAND DELIVERED

Mary E. Drake
Attorney
Enforcement Programs
Illinois Environmental
Protection Agency
1701 First Avenue
Maywood, IL 60153

Re: ESCAST, INC.
EPA File #6984

Dear Mary:

Your letter of June 1, 1984, was received by me on June 4, 1984. Copies were immediately distributed to Escast's management and to our outside consultant, Residuals Management Technology, Inc. ("RMT"). I then met with Escast's management on Wednesday, June 6, 1984, to review this matter and formulate our response.

First, please find attached a copy of the analytical data which RMT received from Aqualab, Inc. I am sure you will note that the concentrations of chemicals in the water samples are in parts per billion. The concentrations for the sand samples are in parts per million. Also enclosed, at the end of the sample data, is a field blank sample which indicates the detection levels possible for each chemical.

I am also enclosing some documentation regarding the occurrence of priority pollutants in the influent samples of 152 publicly owned treatment facilities. As you can see, ninety-one percent (91%) of these facilities had concentrations of 1,1,1-trichloroethane in their influent, with concentrations ranging from one part per billion to 1600 parts per billion. (The analytical data provided to you shows the concentration of 1,1,1-trichloroethane in the Escast water to be 108 parts per billion, in the worst sample.)

Finally, I am enclosing an excerpt from the Federal Register, Volume 45, No. 231, November 28, 1980. This suggests that concentrations of 1,1,1-trichloroethane below 18.4 parts per million would not be a threat to human health and welfare.

Mary E. Drake
June 12, 1984
Page Two

All of this is to emphasize that, while we recognize the seriousness of the situation in which Escast is involved, this is not an emergency situation where there is any imminent threat to human health or safety.

As you may already be aware, the freeboard problem has been alleviated by setting up four 10,000 gallon temporary storage tanks on the Escast property. The cost to Escast of this procedure is approximately \$8,000.

Further, the Kolene salt bath discharge is now going directly into a tanker and is being handled, under a generic permit, as an industrial waste. The cost to Escast of this procedure will be at least \$3,600 per month until the problems with the settling pit are resolved.

As you have indicated, our most immediate problem is the disposal of the liquid in the pit. There would seem to be two options open to Escast at the moment. However, the first option, which would require classification of the liquid in the pit as an F001 waste, seems to have been precluded by Mr. Denning of your office. Although the liquid exhibits none of the characteristics of an F002 waste, your office has classified it as such under its "mixing rule." As I understand it, this rule would require that when sixty-four (64) grams of an F002 chemical waste, such as 1,1,1-trichloroethane, is diluted in 150,000 gallons of industrial waste water, the entire 150,000 gallons must then be classified as an F002 hazardous waste.

If the liquid in the pit could be classified as F001, the disposal cost to Escast would be \$5,000. If the liquid is classified as F002, the cost to Escast of disposing of the liquid will be not less than \$20,000.

We are now working with Mr. Stienhouse at Chemical Waste Management, Inc. ("Chem Waste") of Alsip, Illinois, to have the liquid in the pit disposed of under the F002 classification. Chem Waste has undertaken its own analysis of the liquid and is applying for the necessary disposal permits in Springfield. We will require your commitment to assist Chem Waste in expediting the permit procedure, as provided in your letter of June 1, 1984.

Mary E. Drake
June 12, 1984
Page Three

You have also established a time frame within which Escast is to submit a completed closure plan to the Permit Section of the Division of Land Pollution Control in Springfield. Based upon our recent conversations with RMT, we should have no problem in meeting this time frame. We may wish to discuss with you, once the closure plan is submitted, whether the time frames for the proceeding with actual closure may be accelerated. The cost to Escast of developing the closure plan will be at least \$10,000. Implementation of the plan, once approved, may cost much more.

As you can see, it is Escast's intention to move with all deliberate speed to rectify the problems with the settling pit and to get this entire matter behind us. We greatly appreciate your continued cooperation and understanding. If we or Chem Waste experiences any problems in obtaining the necessary permits to dispose of the liquid in the pit, I will call on you directly for assistance.

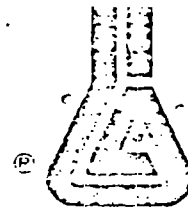
I am providing several copies of this letter and the attachments to you to facilitate your further distribution.

Sincerely,

BML:dmd
Enclosures

cc: H. Kerr
J. Brown
K. Lehner

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100



22 May 1984

RECEIVED RMT, INC.

MAY 23 1984

FILE: _____

Mr. Jerry Brown
ESCAST
21 No. Church St.
Addison, IL 60101

Dear Mr. Brown:

Enclosed are the analytical results for the seven (7) samples received by AQUALAB on 30 April 1984 from Kevin Lehner of Residuals Management Technology, Inc. These samples consisted of 2 water samples, 4 sand samples, plus accompanying water and 1 field blank. Analyses included volatile organic priority pollutant compounds, xylenes, MIBK and ethanol.

The methods used for these analyses are USEPA approved methods and are as follows:

EPA Method 624 - GC/MS Method using purge and trap procedure for volatile organic compounds. Method found in "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater," EPA-600/4-82-057, July, 1982.

EPA Methods
5030 and 8240 - GC/MS Method using purge and trap procedure for volatile organic compounds. Methods found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA SW-846, Second Edition, July, 1982.

ASTM D 3695-78 - "Volatile Alcohols in Water by Direct Aqueous-
Injection Gas Chromatography."

Continued.....

Mr. Jerry Brown
22 May 1984
Page Two

If after reviewing these results you have any questions, please feel free to call. Also enclosed is the completed Chain of Custody form for these samples and the invoice. The field blank analysis was performed for no charge. AQUALAB has been pleased to provide these analytical services for you.

Sincerely,

AQUALAB INC.

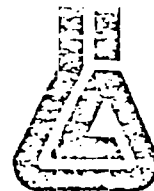
Robert N. Bucaro
Robert N. Bucaro
Division Manager

RNB: i

cc: Mr. Kevin Lehner
RMT

aqualab inc.
rt 20 at valley lane
Streamwood, illinois 60103
312/289-3100

21 May 1984



analytical report

sample no. 55872

Mr. Jerry Brown
ESCAST, INC.
21 No. Church St.
Addison IL 60101

cc: Mr. Kevin A. Lehner
RESIDUALS MGMT. TECH.
1406 E. Washington Av.
Suite 124
P.O. Box 672
Madison WI 53701

Date Taken & Received: 4/30/84

SAMPLE DESCRIPTION: Water #1 - 1' Depth

VOLATILE COMPOUNDS

ug/L Compound

<100 Acrolein (2V)
<100 Acrylonitrile (3V)
<5 Benzene (4V)
<5 Carbon Tetrachloride (6V)
<5 Chlorobenzene (7V)
<5 T 1,2-Dichloroethane (10V)
108 1,1,1-Trichloroethane (11V)
<5 1,1-Dichloroethane (13V)
<10 1,1,2-Trichloroethane (14V)
<10 1,1,2,2-Tetrachloroethane (15V)
<20 Chloroethane (16V)
<50 2-Chloroethylvinyl Ether (19V)
14.4 Chloroform (23V)
<5 T 1,1-Dichloroethylene (29V)

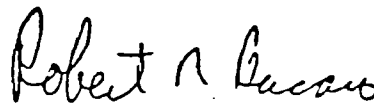
<10 Xylenes
<100 4-methyl-2-pentanone (MIBK)

5.2 Ethanol (mg/L)

ug/L Compound

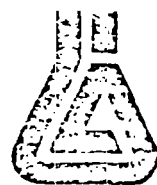
<5 1,2-Trans-Dichloroethylene (30V)
<5 1,2-Dichloropropane (32V)
<5 1,3-Dichloropropylene (33V)
<5 Ethylbenzene (38V)
<10 Methylene Chloride (44V)
<20 Methyl Chloride (45V)
<20 Methyl Bromide (46V)
<10 Bromoform (47V)
<5 Dichlorobromomethane (48V)
<10 Chlorodibromomethane (51V)
<5 Tetrachloroethylene (85V)
<5 T Toluene (86V)
<5 Trichloroethylene (87V)
<20 Vinyl Chloride (88V)

T - Trace


Robert N. Bucaro



aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312-289-3100



21 May 1984

analytical report

sample no. 55873

Mr. Jerry Brown
ESCAST, INC.
21 No. Church St.
Addison IL 60101

cc: Mr. Kevin A. Lehner
RESIDUALS MGMT. TECH.
1406 E. Washington Av.
Suite 124
P.O. Box 672
Madison WI 53701

Date Taken & Received: 4/30/84

SAMPLE DESCRIPTION: Water #2 - 1' Depth

VOLATILE COMPOUNDS

ug/L Compound

<100 Acrolein (2V)
<100 Acrylonitrile (3V)
<5 Benzene (4V)
<5 T Carbon Tetrachloride (6V)
<5 Chlorobenzene (7V)
<5 1,2-Dichloroethane (10V)
36.2 1,1,1-Trichloroethane (11V)
<5 1,1-Dichloroethane (13V)
<10 1,1,2-Trichloroethane (14V)
<10 1,1,2,2-Tetrachloroethane (15V)
<20 Chloroethane (16V)
<50 2-Chloroethylvinyl Ether (19V)
<5 Chloroform (23V)
<5 1,1-Dichloroethylene (29V)

<10 Xylenes
<100 4-methyl-2-pentanone (MIBK)

3.8 Ethanol (mg/L)

ug/L Compound

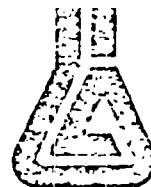
<5 1,2-Trans-Dichloroethylene (30V)
<5 1,2-Dichloropropane (32V)
<5 1,3-Dichloropropylene (33V)
<5 Ethylbenzene (38V)
<10 Methylene Chloride (44V)
<20 Methyl Chloride (45V)
<20 Methyl Bromide (46V)
<10 Bromoform (47V)
<5 Dichlorobromomethane (48V)
<10 Chlorodibromomethane (51V)
<5 Tetrachloroethylene (85V)
<5 T Toluene (86V)
<5 Trichloroethylene (87V)
<20 Vinyl Chloride (88V)

T - Trace

Robert N. Bucaro
Robert N. Bucaro



aqualab inc. .
rt 20 at valley lane
Streamwood, illinois 60103
312/289-3100



21 May 1984

analytical report

sample no. 55874

Mr. Jerry Brown
ESCAST, INC.
21 No. Church St.
Addison IL 60101

cc: Mr. Kevin A. Lehner
RESIDUALS. MGMT. TECH.
1406 E. Washington Av.
Suite 124
P.O. Box 672
Madison WI 53701

Date Taken & Received: 4/30/84

SAMPLE DESCRIPTION: Sand #1

VOLATILE COMPOUNDS

mg/Kg Compound

<10 Acrolein (2V)
<10 Acrylonitrile (3V)
<1 Benzene (4V)
<1 Carbon Tetrachloride (6V)
<1 Chlorobenzene (7V)
<1 1,2-Dichloroethane (10V)
5 1,1,1-Trichloroethane (11V)
<1 T 1,1-Dichloroethane (13V)
<1 1,1,2-Trichloroethane (14V)
<1 1,1,2,2-Tetrachloroethane (15V)
<1 Chloroethane (16V)
<1 2-Chloroethylvinyl Ether (19V)
<1 Chloroform (23V)
3 1,1-Dichloroethylene (29V)

<1 Xylenes
23 4-methyl-2-pentanone (MIBK)

210 Ethanol

mg/Kg Compound

<1 1,2-Trans-Dichloroethylene (30V)
<1 1,2-Dichloropropane (32V)
<1 1,3-Dichloropropylene (33V)
<1 Ethylbenzene (38V)
<1 Methylene Chloride (44V)
<1 Methyl Chloride (45V)
<1 Methyl Bromide (46V)
<1 Bromoform (47V)
<1 Dichlorobromomethane (48V)
<1 Chlorodibromomethane (51V)
<1 Tetrachloroethylene (85V)
<1 T Toluene (86V)
<1 Trichloroethylene (87V)
<1 Vinyl Chloride (88V)

T - Trace

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100



21 May 1984

analytical report

sample no. 55875

Mr. Jerry Brown
ESCAST, INC.
21 No. Church St.
Addison IL 60101

cc: Mr. Kevin A. Lehner
RESIDUALS MGMT. TECH.
1406 E. Washington Av.
Suite 124
P.O. Box 672
Madison WI 53701

Date Taken & Received: 4/30/84

SAMPLE DESCRIPTION: Sand #2

VOLATILE COMPOUNDS

mg/Kg Compound

<10 Acrolein (2V)
<10 Acrylonitrile (3V)
<1 Benzene (4V)
<1 Carbon Tetrachloride (6V)
<1 Chlorobenzene (7V)
<1 1,2-Dichloroethane (10V)
<1 T 1,1,1-Trichloroethane (11V)
<1 1,1-Dichloroethane (13V)
<1 1,1,2-Trichloroethane (14V)
<1 1,1,2,2-Tetrachloroethane (15V)
<1 Chloroethane (16V)
<1 2-Chloroethylvinyl Ether (19V)
<1 Chloroform (23V)
<1 1,1-Dichloroethylene (29V)

<1 Xylenes
<1 4-methyl-2-pentanone (MIBK)

<1 Ethanol

mg/Kg Compound

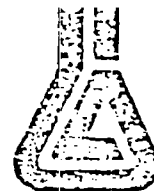
<1 1,2-Trans-Dichloroethylene (30V)
<1 1,2-Dichloropropane (32V)
<1 1,3-Dichloropropylene (33V)
<1 Ethylbenzene (38V)
<1 Methylene Chloride (44V)
<1 Methyl Chloride (45V)
<1 Methyl Bromide (46V)
<1 Bromoform (47V)
<1 Dichlorobromomethane (48V)
<1 Chlorodibromomethane (51V)
<1 Tetrachloroethylene (85V)
<1 Toluene (86V)
<1 Trichloroethylene (87V)
<1 Vinyl Chloride (88V)

T - Trace

Robert N. Bucaro
Robert N. Bucaro

aqualab inc. .
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100

21 May 1984



analytical report

sample no. 55876

Mr. Jerry Brown
ESCAST, INC.
21 No. Church St.
Addison IL 60101

cc: Mr. Kevin A. Lehner
RESIDUALS MGMT. TECH.
1406 E. Washington Av.
Suite 124
P.O. Box 672
Madison WI 53701

Date Taken & Received: 4/30/84

SAMPLE DESCRIPTION: Sand #3

VOLATILE COMPOUNDS

mg/Kg Compound

<10 Acrolein (2V)
<10 Acrylonitrile (3V)
<1 Benzene (4V)
<1 T Carbon Tetrachloride (6V)
<1 Chlorobenzene (7V)
<1 1,2-Dichloroethane (10V)
2 1,1,1-Trichloroethane (11V)
<1 T 1,1-Dichloroethane (13V)
<1 1,1,2-Trichloroethane (14V)
<1 1,1,2,2-Tetrachloroethane (15V)
<1 Chloroethane (16V)
<1 2-Chloroethylvinyl Ether (19V)
<1 Chloroform (23V)
<1 1,1-Dichloroethylene (29V)

<1 Xylenes
<1 4-methyl-2-pentanone (MIBK)

mg/Kg Compound

<1 1,2-Trans-Dichloroethylene (30V)
<1 1,2-Dichloropropane (32V)
<1 1,3-Dichloropropylene (33V)
<1 Ethylbenzene (38V)
<1 Methylene Chloride (44V)
<1 Methyl Chloride (45V)
<1 Methyl Bromide (46V)
<1 Bromoform (47V)
<1 Dichlorobromomethane (48V)
<1 Chlorodibromomethane (51V)
<1 Tetrachloroethylene (85V)
<1 Toluene (86V)
<1 Trichloroethylene (87V)
<1 Vinyl Chloride (88V)

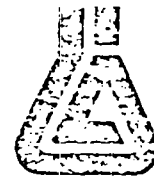
12.2 Ethanol

T - Trace

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100

21 May 1984



analytical report

sample no. 55877

Mr. Jerry Brown
ESCAST, INC.
21 No. Church St.
Addison IL 60101

cc: Mr. Kevin A. Lehner
RESIDUALS MGMT. TECH.
1406 E. Washington Av.
Suite 124
P.O. Box 672
Madison WI 53701

Date Taken & Received: 4/30/84

SAMPLE DESCRIPTION: Sand #4

VOLATILE COMPOUNDS

mg/Kg Compound

<10 Acrolein (2V)
<10 Acrylonitrile (3V)
<1 Benzene (4V)
<1 T Carbon Tetrachloride (6V)
<1 Chlorobenzene (7V)
<1 1,2-Dichloroethane (10V)
1 1,1,1-Trichloroethane (11V)
<1 1,1-Dichloroethane (13V)
<1 1,1,2-Trichloroethane (14V)
<1 1,1,2,2-Tetrachloroethane (15V)
<1 Chloroethane (16V)
<1 2-Chloroethylvinyl Ether (19V)
<1 Chloroform (23V)
<1 1,1-Dichloroethylene (29V)

<1 Xylenes
<1 T 4-methyl-2-pentanone (MIBK)

7.2 Ethanol

T - Trace

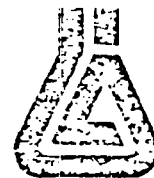
mg/Kg Compound

<1 1,2-Trans-Dichloroethylene (30V)
<1 1,2-Dichloropropane (32V)
<1 1,3-Dichloropropylene (33V)
<1 Ethylbenzene (38V)
<1 Methylene Chloride (44V)
<1 Methyl Chloride (45V)
<1 Methyl Bromide (46V)
<1 Bromoform (47V)
<1 Dichlorobromomethane (48V)
<1 Chlorodibromomethane (51V)
<1 Tetrachloroethylene (85V)
<1 Toluene (86V)
<1 Trichloroethylene (87V)
<1 Vinyl Chloride (88V)

Robert N. Bucaro
Robert N. Bucaro

aqualab inc.
rt 20 at valley lane
streamwood, illinois 60103
312/289-3100

21 May 1984



analytical report

sample no. 55878

Mr. Jerry Brown
ESCAST, INC.
21 No. Church St.
Addison IL 60101

cc: Mr. Kevin A. Lehner
RESIDUALS MGMT. TECH.
1406 E. Washington Av.
Suite 124
P.O. Box 672
Madison WI 53701

Date Taken & Received: 4/30/84

SAMPLE DESCRIPTION: Field Blank

VOLATILE COMPOUNDS

ug/L Compound

<100 Acrolein (2V)
<100 Acrylonitrile (3V)
<5 Benzene (4V)
<5 Carbon Tetrachloride (6V)
<5 Chlorobenzene (7V)
<5 1,2-Dichloroethane (10V)
<5 1,1,1-Trichloroethane (11V)
<5 1,1-Dichloroethane (13V)
<10 1,1,2-Trichloroethane (14V)
<10 1,1,2,2-Tetrachloroethane (15V)
<20 Chloroethane (16V)
<50 2-Chloroethylvinyl Ether (19V)
<5 Chloroform (23V)
<5 1,1-Dichloroethylene (29V)

<10 Xylenes
<100 4-methyl-2-pentanone (MIBK)

<1 Ethanol (mg/L)

ug/L Compound

<5 1,2-Trans-Dichloroethylene (30V)
<5 1,2-Dichloropropane (32V)
<5 1,3-Dichloropropylene (33V)
<5 Ethylbenzene (38V)
<10 Methylene Chloride (44V)
<20 Methyl Chloride (45V)
<20 Methyl Bromide (46V)
<10 Bromoform (47V)
<5 Dichlorobromomethane (48V)
<10 Chlorodibromomethane (51V)
<5 Tetrachloroethylene (85V)
<5 Toluene (86V)
<5 Trichloroethylene (87V)
<20 Vinyl Chloride (88V)

T - Trace

Robert N. Bucaro
Robert N. Bucaro

TABLE V

OCCURRENCE OF PRIORITY POLLUTANTS
IN POTW INFLUENT SAMPLES

| PARAMETER | NUMBER OF SAMPLES ANALYZED | PERCENT OF TIMES DETECTED | UNITS | MINIMUM(1) | MAXIMUM |
|-----------------------------|----------------------------------|---------------------------------|-------|------------|---------|
| ZINC | 146 | 100 | UG/L | 23 | 7680 |
| COPPER | 146 | 100 | UG/L | 34 | 1190 |
| CYANIDE | 150 | 99 | UG/L | 3 | 2500 |
| CHROMIUM | 146 | 99 | UG/L | 8 | 2380 |
| TOLUENE | 152 | 98 | UG/L | 2 | 500 |
| TETRACHLOROETHYLENE | 152 | 97 | UG/L | 2 | 1100 |
| CHLOROFORM | 152 | 96 | UG/L | 1 | 430 |
| METHYLENE CHLORIDE | 152 | 95 | UG/L | 1 | 11000 |
| TRICHLOROETHYLENE | 152 | 95 | UG/L | 1 | 860 |
| BIS(2-ETHYLHEXYL) PHTHALATE | 152 | 94 | UG/L | 2 | 390 |
| 1,1,1-TRICHLOROETHANE | 152 | 91 | UG/L | 1 | 1600 |
| NICKEL | 146 | 87 | UG/L | 11 | 1930 |
| ETHYLBENZENE | 152 | 86 | UG/L | 1 | 448 |
| SILVER | 146 | 84 | UG/L | 2 | 77 |
| PHENOL | 152 | 83 | UG/L | 1 | 380 |
| LEAD | 146 | 79 | UG/L | 16 | 935 |
| CADMIUM | 146 | 71 | UG/L | 1 | 1800 |
| MERCURY | 146 | 70 | NG/L | 200 | 3900 |
| BENZENE | 152 | 68 | UG/L | 1 | 1560 |
| DI-N-BUTYL PHTHALATE | 152 | 63 | UG/L | 1 | 105 |
| DIETHYL PHTHALATE | 152 | 62 | UG/L | 1 | 33 |
| BUTYL BENZYL PHTHALATE | 152 | 59 | UG/L | 2 | 140 |
| 1,2-TRANS-DICHLOROETHYLENE | 152 | 58 | UG/L | 1 | 97 |
| NAPHTHALENE | 152 | 55 | UG/L | 1 | 150 |
| 1,1-DICHLOROETHANE | 152 | 40 | UG/L | 1 | 24 |
| 1,1-DICHLOROETHYLENE | 152 | 35 | UG/L | 1 | 243 |
| 1,2-DICHLOROBENZENE | 152 | 30 | UG/L | 2 | 440 |
| PENTACHLOROPHENOL | 152 | 27 | UG/L | 2 | 94 |
| ANTHRACENE | 152 | 27 | UG/L | 1 | 93 |

From "Fate of Priority Pollutants in Publicly Owned Treatment Works" USEPA 44/1-80-31